

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,934,053 B1
APPLICATION NO. : 09/487586
DATED : August 23, 2005
INVENTOR(S) : Lingappa K. Mestha and S. Dianat

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

The Title Page, showing an illustrative figure, should be deleted and substitute therefor the attached title page.

Figure 1, change to the attached Figure 1;

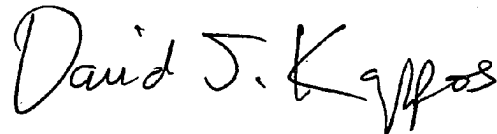
Page 4, Figure 2, change to the attached Figure 2;

Page 5, Figure 3, change to the attached Figure 3;

Page 6, Figure 4, please delete.

Signed and Sealed this

Eighth Day of September, 2009

A handwritten signature in black ink that reads "David J. Kappos". The signature is written in a cursive, flowing style with a large initial 'D' and a stylized 'K'.

David J. Kappos
Director of the United States Patent and Trademark Office

(12) **United States Patent**
Mestha et al.

(10) Patent No.: **US 6,934,053 B1**
(45) Date of Patent: **Aug. 23, 2005**

(54) **METHODS FOR PRODUCING DEVICE AND ILLUMINATION INDEPENDENT COLOR REPRODUCTION**

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(73) Assignee: **Xerox Corporation**, Stamford, CT (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **09/487,586**

(22) Filed: **Jan. 19, 2000**

(51) Int. Cl.⁷ **H04N 1/56; H04N 1/60**

(52) U.S. Cl. **358/1.9; 358/504; 358/523**

(58) Field of Search **358/1.9, 518, 504, 358/523, 501, 520, 521, 406, 530; 382/167, 312**

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,959,669 A	9/1990	Haneda et al.	346/157
5,200,816 A	4/1993	Rose	358/80
5,339,176 A	8/1994	Smilansky et al.	358/504
5,357,448 A	10/1994	Stanford	364/526
5,452,111 A *	9/1995	Giorgianni et al.	358/504
5,481,380 A *	1/1996	Bestmann	358/504
5,502,799 A *	3/1996	Tsuji et al.	345/600
5,612,902 A *	3/1997	Stokes	364/526
5,664,072 A *	9/1997	Ueda et al.	395/109
5,671,059 A *	9/1997	Vincent	356/402
5,708,916 A *	1/1998	Mestha	399/49
5,771,311 A	6/1998	Arai	382/162
5,809,213 A	9/1998	Bhattacharjya	395/106
5,877,787 A *	3/1999	Edge	347/19
5,903,712 A *	5/1999	Wang et al.	358/1.9

(Continued)

FOREIGN PATENT DOCUMENTS

EP	0 491 131 A1	6/1992	.....	G01J/3/51
EP	0582997 A1	2/1994	.....	H04N/1/46
EP	0 625 847 A1	11/1994	.....	H04N/1/46
EP	0 811 829 A2	12/1997	.....
EP	0868074 A1	9/1998	.....	H04N/1/60
EP	0 915 615 A2	5/1999	.....	H04N/1/60
WO	97/34409 A2	9/1997	.....

OTHER PUBLICATIONS

Berns, R.S. "Spectral Modeling of a Dye Diffusion Thermal Transfer Printer", *Journal of Electronic Imaging*, vol. 2, No. 4, Oct. 1993, pp. 359-370.

U.S. Appl. No. 09/487,587, filed Jan. 19, 2000, Yao Wang et al.

U.S. Appl. No. 09/221,996, filed Dec. 29, 1998, Lingappa K. Mestha et al.

U.S. Appl. No. 10/248,387, filed Jan. 15, 2003, Lalit K. Mestha et al.

U.S. Appl. No. 09/461,042, filed Dec. 15, 1999, Lingappa K. Mestha et al.

U.S. Appl. No. 09/566,291, filed May 5, 2000, Mestha et al.
Berns, R.S.: "Spectral modeling of a Dye Diffusion Thermal Transfer Printer", *Journal of Electronic Imaging*, vol. 2, No. 4, Oct. 1993, pp. 359-370.

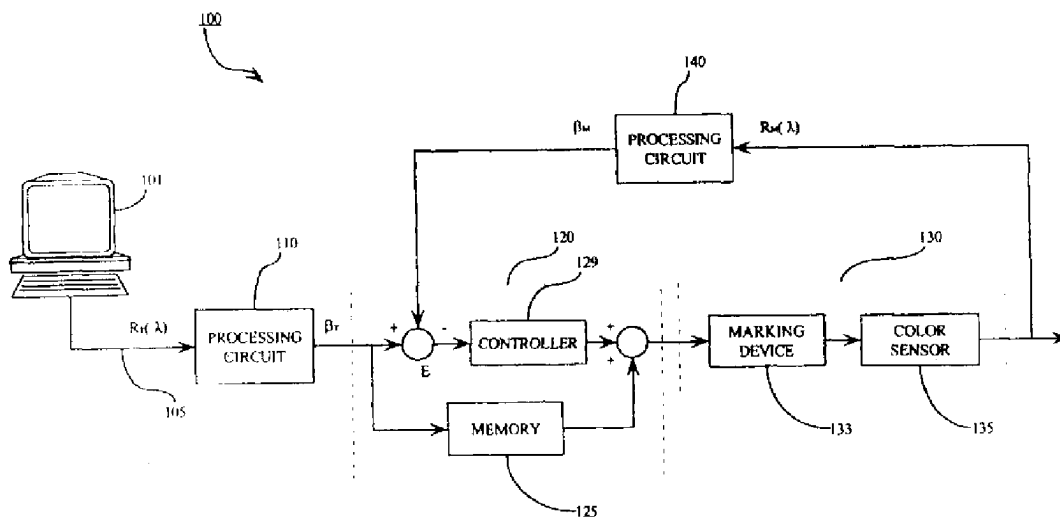
Primary Examiner—Scott A. Rogers

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(57) **ABSTRACT**

Spectrally matched color outputs are obtained using data from a real-time sensor, such as, for example, a spectrophotometer on the output trays of a marking devices to determine the output spectra of a reproduced image. The output spectra of the reproduced image is compared with an output spectra of a target spectra stored in a computer memory to produce a mapping table that will spectrally match all subsequently reproduced color images in real-time. Thus, output color spectra are matched between displays and prints, scans and prints, scans and displays, or copies and prints.

28 Claims, 4 Drawing Sheets



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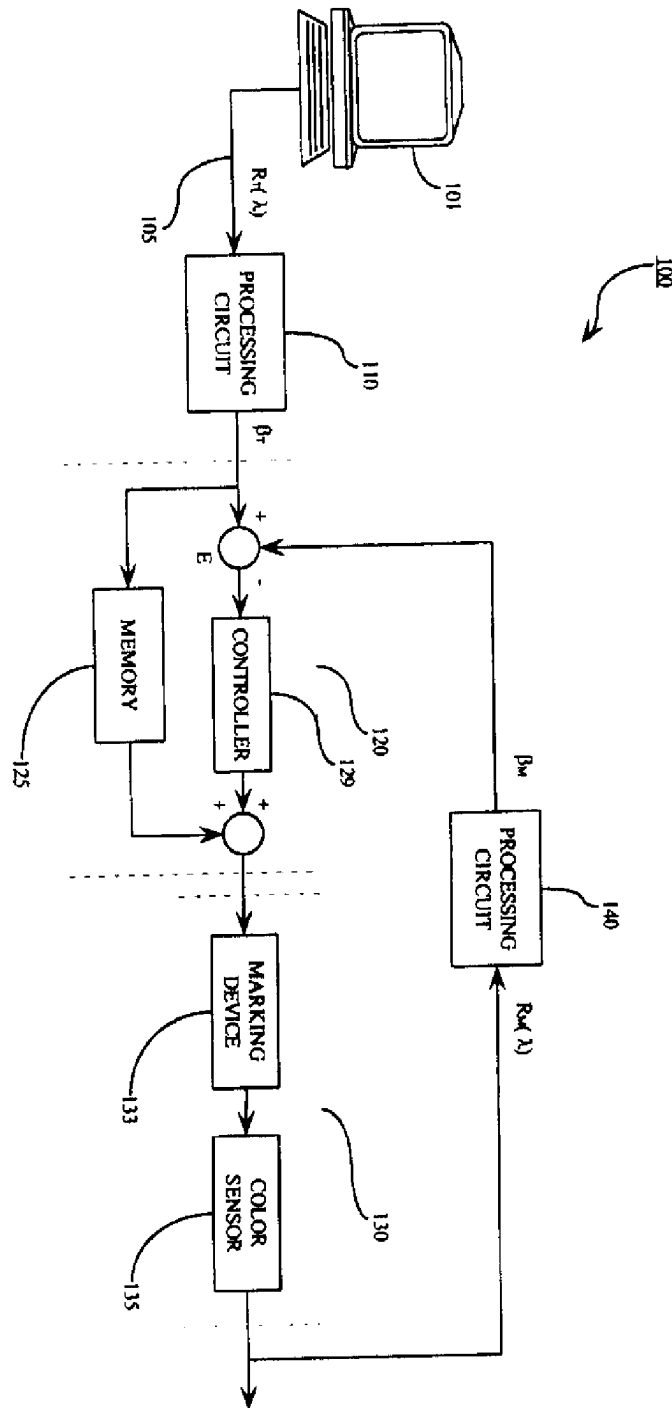


FIG. 1

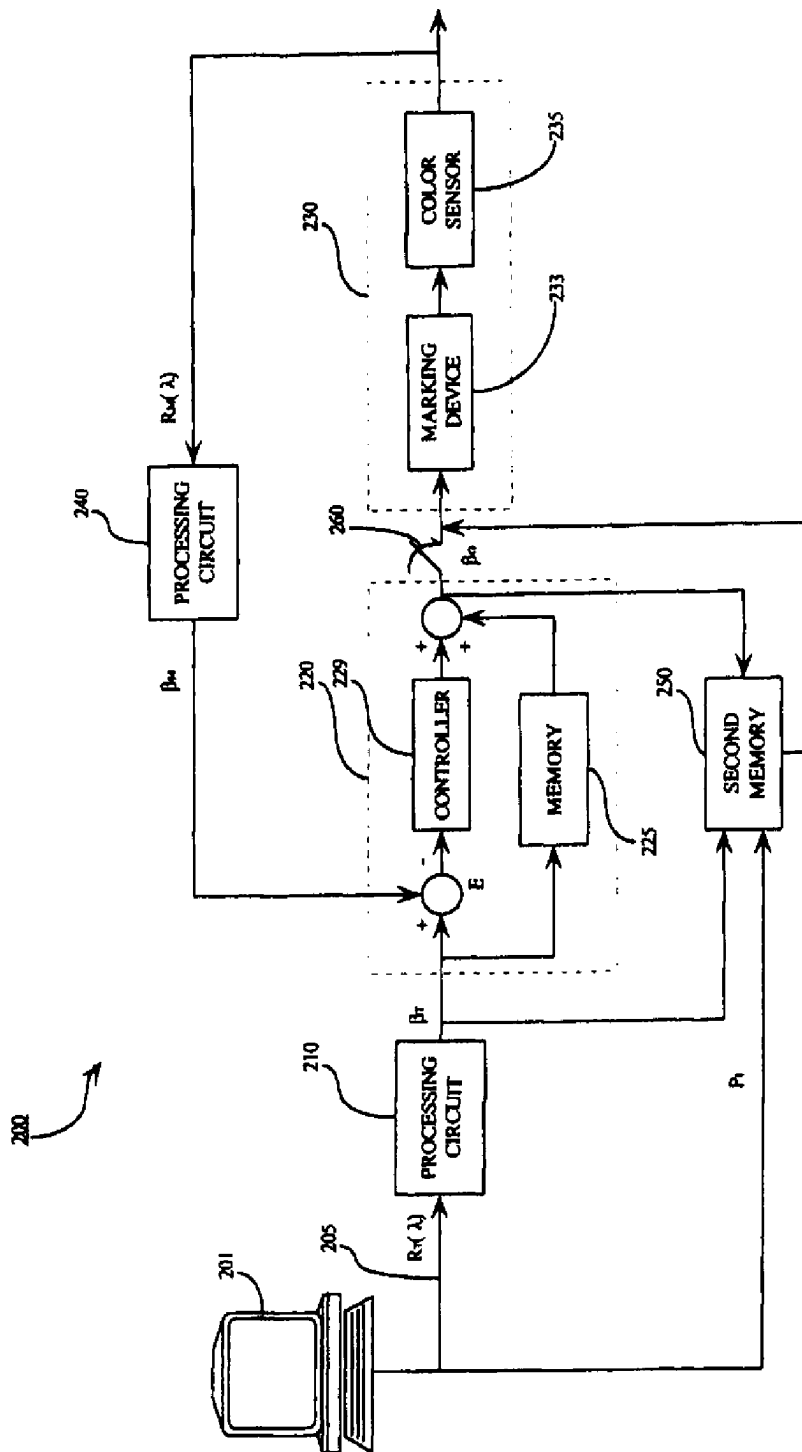
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FIG. 2



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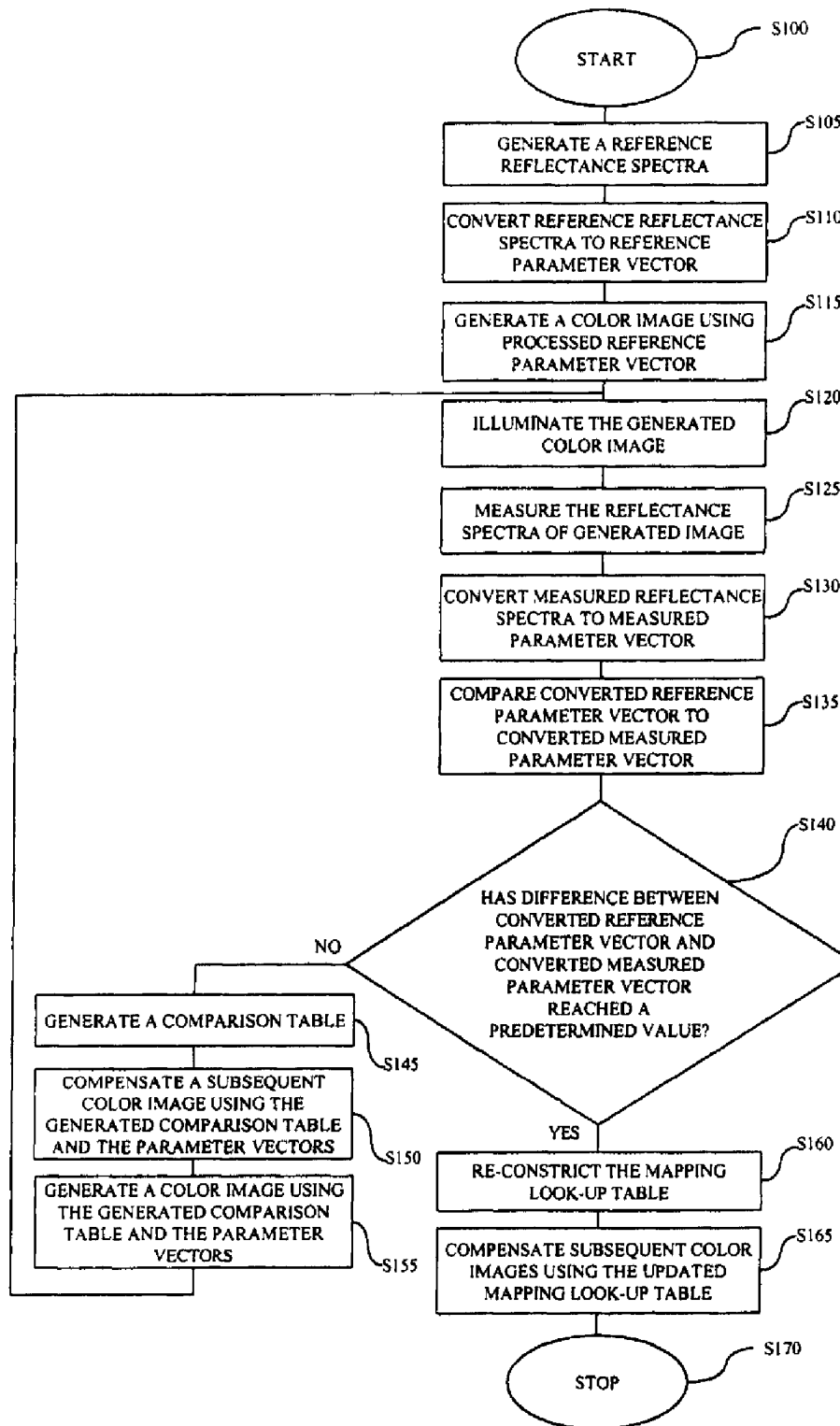


FIG. 3